

By placing them in this manner it is evident that the entire width of the web will resist the strain of the screws so that they will not distort the work. Further than this, the screws *E* act as drivers, as they sink slightly into the work when set up. Two holes *G* are drilled at opposite sides of the fixture, these holes being utilized to force the work out of the jaws when removing it from the fixture.

A hardened and ground tool steel bushing *E* is placed in the fixture, and acts as a pilot for the cutter-head used in machining the work; and it will be noted that the surface *F* of the fixture is relieved to permit the passage of the tools through the work. In machining the smaller piece, it is only necessary

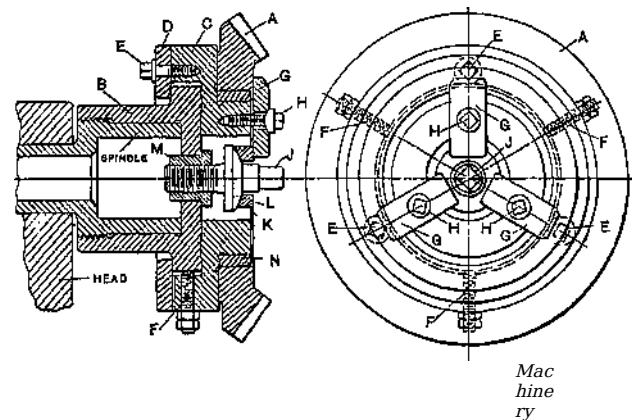


Fig. 5. Ring Bevel-gear Fixture provided with Adjustable Clamps

to remove the jaws *B* and hollow set-screws *H*, and substitute those suited for the smaller piece. Therefore, one fixture was found sufficient to handle both pieces and replacements were made easy by the construction. Adaptations of this type of fixture may be made for many varieties of work, when several pieces are to be handled, and it will be found

both efficient and economical in upkeep.

Bevel-gear Fixture with Adjustable Features. —The work *A*, shown in Fig. 5, is a ring bevel-gear blank of heavy section, which has been partly machined. In this instance the fixture is really composed of two separate pieces, one of which, *J*?, is